Serial Number: 09/541452

Filing Date: March 31, 2000
Title: INDUCTIVE COIL APPARATUS FOR BIO-MEDICAL TELEMETRY

Page 2 Dkt: 279.152US1

Amendment to the Claims

	1. (Canceled).
C	2. (Currently Amended) The apparatus of claim 1 15, further including a flexible housing, where the flexible housing encases the first and the second telemetry coils.
	3. (Canceled). 4. (Canceled). 5. (Canceled).
C2	6. (Currently Amended) The apparatus of claim 5 15, where the magnetically permeable material is made of a ferrite powder.
	7. (Canceled).
<u></u>	8. (Currently Amended) The apparatus of claim ½, where the flexible housing is conformable to an irregular surface.
	9. (Currently Amended) The apparatus of claim ± 2 , where the flexible housing is constructed of an insulating material.
	10. (Currently Amended) The apparatus of claim 4 2, where the flexible housing is constructed of a material, which retains a formed shape.
	11. (Original) The apparatus of claim 10, where the material is polyimide.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/541452

Filing Date: March 31, 2000

Title: INDUCTIVE COIL APPARATUS FOR BIO-MEDICAL TELEMETRY

Page 3 Dkt: 279.152US1

13. (Currently Amended) The apparatus of claim 12 2, further including a flexible housing, where the first telemetry coil and the second telemetry coil are concentrically positioned in a common plane within the flexible housing.

DI

14. (Currently Amended) The apparatus of claim 4 2, further including a padded cover disposed over the flexible housing.

15

15. (Currently Amended) A telemetry coil for communicating with an implanted medical device, comprising: one or more a plurality of loops of a conductive wire that define a predetermined outer dimension sufficient to allow communication between the first telemetry coil and the medical device, where the predetermined outer dimension is a diameter in a range of fifteen (15) to forty-six (46) centimeters, where the one or more plurality of loops of a conductive wire wound substantially in a common plane and concentrically around a central core, where the central core includes a magnetically permeable material, and where the loops are positioned around the central core to form a substantially constant gap between adjacent loops.

23.(Currently Amended) An apparatus for communication with an implantable medical device, comprising:

a first and a second telemetry coil, where the first and the second telemetry coil include a predetermined outer dimension sufficient to allow communications between the first and the second telemetry coils and the implantable medical device where the first and the second telemetry coils include one or more loops of a conductive wire, and wherein the first telemetry coil and the second telemetry coil are concentrically planarly wound substantially in a common plane, where the conductive wire is wound around a core, where the conductive loops are positioned around the central core to form a substantially constant gap between adjacent loops, where the core is constructed of a magnetically permeable material that enhances flux density of the apparatus, where the magnetically permeable material includes a ferrite powder; and

a communication lead having a first end and a second end, where the first end is

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/541452

Filing Date: March 31, 2000

Title: INDUCTIVE COIL APPARATUS FOR BIO-MEDICAL TELEMETRY

Page 4 Dkt: 279.152US1



communicatively coupled to the first and the second telemetry coil and the second end adapted to be communicatively coupled to a medical device programmer.

- 24. (Previously Added) The apparatus of claim 23, where the predetermined outer dimension is a diameter in a range of fifteen (15) to forty-six (46) centimeters.
- 25. (Previously Amended) The apparatus of claim 23, further comprising:
- a flexible housing, where the flexible housing encases the first and the second telemetry coil, where the flexible housing is conformable to an irregular surface.
- 26. (Previously Added) The apparatus of claim 25, where the flexible housing is constructed of an insulating material.
- 28. (Canceled).
- 29. (Canceled).
- 30. (Currently Amended) The An apparatus of claim 1 for communication with an implanted medical device, comprising:

a first and a second telemetry coil concentrically planarly wound substantially in a common plane and each adapted to inductively couple with the implanted medical device, where the second telemetry coil is constructed and arranged to operate at a different telemetry operational frequency than the first telemetry coil;

and

a communication lead having a first end and a second end, where the first end is communicatively coupled to the first and the second telemetry coil and the second end is adapted to be communicatively coupled to a medical device programmer.